

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/693,176	10/24/2003	John Martin Burns	HSJ920030216US1	2612
7590 09/14/2006 OIP			EXAMINER	
Shelley P. Eberle			RONESI, VICKEY M	
Reed & Eberle Suite 210	LLP	SEP 25 ZOOR	ART UNIT	PAPER NUMBER
800 Menio Avenue			1714	
Menlo Park, CA 95014		PRIORMARK OFF	DATE MAILED: 09/14/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Commence	10/693,176	BURNS, JOHN MARTIN			
Office Action Summary	Examiner	Art Unit			
	Vickey Ronesi	1714			
The MAILING DATE of this communication apporariod for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DAY WHICHEVER IS LONGER, FROM THE MAILING DAY Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period with the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir	N. nely filed the mailing date of this communication.			
Status					
Responsive to communication(s) filed on <u>26 Ju</u>	<u>ine 2006</u> .				
This action is FINAL. 2b) \square This	action is non-final.				
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
01:1:1:1:1	ding in the application				
Claim(s) 1,3-10,12-18,20 and 23-34 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.					
- Claim(s) is/are allowed	vir from consideration.				
5)	otad				
Olaim(a) infare objected to	cied.				
	r election requirement				
0)—	r diction requirement.				
Application Papers					
The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the	Examiner.			
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)-(d) or (f).			
1. Certified copies of the priority documents	s have been received.				
2. Certified copies of the priority documents		ion No.			
3. Copies of the certified copies of the prior					
application from the International Bureau	ı (PCT Rule 17.2(a)).	-			
⋆ See the attached detailed Office action for a list	of the certified copies not receive	ed.			
ant(s)					
Attachment(s) Notice of References Cited (PTO-892) Notice of Draffsperson's Patent Drawing Review (PTO 049)	4) 🔲 Interview Summary	(PTO-413)			
Notice of Draitsperson's Faterit Drawing Review (F10-946)	Paper No(s)/Mail Di	ate			
3) Information Disclosure Statement(s) (PTO/SB/08) paper No(s)/Mail Date	5) Notice of Informal F 6) Other:	Patent Application			
Trademark Office	0,				

Art Unit: 1714

DETAILED ACTION

Page 2

1. All outstanding objections and rejections, except for those given below, are withdrawn in light of applicant's amendment filed 6/26/2006.

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
- The new grounds of rejection set forth below are necessitated by applicant's amendment filed 6/26/2006. In particular, the claims have been amended to recite an amount of 0.001-1 parts by weight perfluorinated polyether and 99-99.999 parts by weight of the solvent and solubilizer. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 112

4. Claims 1, 3-10, 12-18, 20, and 23-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1, 3-5, 9, 10, 12-14, 18, 24, 26, 28, 31, and 33, the rejection is adequately set forth in paragraph 2 of Office action mailed 3/21/2006 and is incorporated here by reference.

With respect to the other claims, they are rejected for being dependent on a rejected claim.

In response to applicant's argument that language "solubilizer is selected from alcohols and cyclic ethers" is proper Markush language, the MPEP is very clear regarding Markush language and it necessarily includes the language "selected from the group consisting of."

Art Unit: 1714

MPEP § 2173.05(h). Also note that applicant's citation of "TRAINING MATERIALS FOR EXAMINING PATENT APPLICATIONS" is for 35 USC 112, first paragraph and is not pertinent in this discussion of 35 USC 112, second paragraph.

Claim Rejections - 35 USC § 103

5. Claims 1, 3, 4, 6-10, 12, 13, 15-18, 20, 23-26, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohnuki et al (US 5,292,585) in view of Nishimura et al (US 4,597,882).

Ohnuki et al discloses a purified perfluoropolyether lubricant that is used in a magnetic recording medium which is made by applying a magnetic recording layer to a substrate, applying a carbon layer (i.e., overcoat layer), and then applying the perfluoropolyether lubricant in a compatible solvent (col. 13, lines 10-20, 47-55). The lubricant is present in an exemplified concentration of 0.25 vol % (col. 11, lines 64-68).

Ohnuki et al teaches the use of fluorinated solvents (col. 5, lines 59-68), it does not teach the use of an alcohol added to the solvent.

Nishimura et al discloses fluorine-containing solvents compatible with fluorine-containing lubricant such as perfluoropolyether such as an azeotropic mixture of trichlorotrifluoroethane and ethanol and a mixture of trichlorotrifluoroethane and isopropanol (col. 3, lines 38-49).

Given that Ohnuki et al is open to the use of any fluorine-containing solvent compatible with perfluoropolyether, it would have been obvious to one of ordinary skill in the art to utilize a

Art Unit: 1714

fluorine-containing solvent with an alcohol as the compatible solvent when preparing the magnetic recording medium of Ohnuki et al.

With respect to claims 7, 8, 16, and 17, Ohnuki et al teaches adding the perfluorinated polyether to a compatible solvent and Nishimura et al teaches adding the lubricant to a solvent mixture containing fluorine-containing solvent and alcohol, however, neither teaches mixing the lubricant first with the fluorine-containing solvent and then adding the alcohol or mixing simultaneously the lubricant, solvent, and alcohol. Nevertheless, it is considered that any mixing order is obvious since no criticality for the mixing order has been established. Case law holds that the selection of any order of mixing ingredients is *prima facie* obvious. *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930).

Response to Arguments

6. Applicant's arguments filed 6/26/2006 have been fully considered but they are not persuasive. Specifically, applicant argues that Ohnuki et al does not teach the use of an alcohol or even a solubilizer;

In response, the examiner agrees that Ohnuki et al does not teach the use of an alcohol or a solubilizer, however, that is exactly why the disclosure of Nishimura et al has been relied upon. While Nishimura et al does not disclose an amount of 0.001-1 parts by weight of perfluorinated polyether to about 99-99.999 parts by weight of solvent and solubilizer, these relative amounts are already provided for by Ohnuki et al which teaches that the lubricant (i.e., perfluorinated polyether) is present in an exemplified concentration of 0.25 vol % (col. 11, lines 64-68).

Art Unit: 1714

Allowable Subject Matter

7. Claims 5, 14, and 27-32 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
neither Ohnuki et al nor Nishimura et al teaches the use of cyclic ethers or halogenated alcohols
as a solubilizer of fluorinated solvent and perfluorinated polyethers.

Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Burdzy et al (US 6,486,103) discloses a perfluoropolyether lubricating composition containing cyclic ethers as the organic solvent, however, it fails to teach cyclic ethers in combination with fluorinated solvents in relative amounts presently claimed.
- 9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1714

Page 6

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

_{9/1}1/2006 _{Vic}key Ronesi

N

VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Application/Control No. Applicant(s)/Patent Under Reexamination 10/693,176 BURNS, JOHN MARTIN Notice of References Cited Examiner Art Unit Page 1 of 1 Vickey Ronesi 1714 **U.S. PATENT DOCUMENTS Document Number** Date Country Code-Number-Kind Code Name MM-YYYY Classification US-6,486,103 11-2002 Burdzy et al. 508/582 A US-В US-C US-0 US-E US-F US-G US-Н USı US-J US-Κ US-L US-M FOREIGN PATENT DOCUMENTS **Document Number** Date Country Country Code-Number-Kind Code Name MM-YYYY Classification Ν 0 Ρ a R 5 Τ **NON-PATENT DOCUMENTS** Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) U ٧ W Х

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)



FORWARD TIME EXP RTN TO SEND
1400 PAGE MILL RD #A
PALO ALTO CA 94304-1124